CHAPTER 24
HILLSIDE DEVELOPMENT STANDARDS

10-24-6: APPLICATION REPORTS AND INFORMATION:

Any application for a grading permit on slopes greater than twenty percent (20%) within the county shall be required to be submitted to the county staff with the following technical information and reports:

A.An earth grading plan, prepared by a licensed civil or geotechnical engineer. Said plan shall show (unless excepted by the county staff):

1. Existing and proposed contours and cross sections.

2. Accurate contours showing the topography of the existing ground, and which must be extended at least two hundred feet (200') outside of all boundary lines of the site, or sufficient to show on and off site drainage.

3. The slope of proposed cuts and fills shall be shown on the grading plan.

4. Landscape or other approved techniques for stabilizing cuts and fills.

5. All cuts and fills shall conform to the Utah uniform building standards act rules, and the international building code.

B.A drainage plan showing plans of all surface and subsurface drainage systems and facilities, walls, cribbing or other erosion protection devices to be constructed in connection with, or as a part of, the proposed project, together with a map showing the drainage area and estimated runoff of the area served by any drainage system or facility. The drainage plan will show plans for protecting expansive areas that may be a part of the overall development.

C.A plan showing all existing or proposed streets, buildings, easements, or drainage channels on or proposed to be located on the property.

D.Elevation drawings showing the location of all existing and proposed structures and how or to what extent hillside cuts or fills will be covered and/or retained by the proposed development.

E.An earth grading plan prepared by a licensed professional engineer which plan shall show the following:

1. Topography: Property contours shall be shown at two foot (2') intervals and five foot (5') intervals for slopes.

2. Terrain Details: Special notes and details of the existing terrain shall be noted on the required topographic information.

3. Proposed Earth Grading Plan Details: The dimensions, elevations and contours of any proposed earth grading shall be shown.

4. Material Disposal: A description shall be included of the methods to be employed in disposing of soil and other material removed, including the location of the disposal site.

5. Timetable: A schedule shall be included showing when each stage of the project will be completed, including the estimated starting and completion dates.

F.Drainage control plan and report.

1. All drainage systems shall be separate and independent from the sanitary sewer system.

2. Drainage and flood control shall be designed in conformance with the county flood control master

plan where applicable.

3. When modification to a natural drainage channel is proposed within the development, such changes will be addressed in the drainage study and shown on the improvement plans. The developer may be required to dedicate rights of way or to record drainage easements for structures and/or improvements needed to carry storm water runoff in the event approval is given for the proposed modifications. The developer shall be required to check with other agencies besides the county to determine whether or not such agency claims some jurisdiction over the land in question.

4. The point of location where the natural drainage channel enters and leaves the property may not be changed without approval of the county.

5. Any drainage basins located upstream of the development shall be considered to be fully developed in conformance with the county's current land use plan. Effects on the downstream property owners relative to increased flood potential and nuisance water shall also be considered in the design, including acquisition of easements or agreements where necessary, or construction or modification of improvements where needed.

6. The developer shall provide the necessary means to assure drainage within the property being developed by making use of existing facilities or natural washes and constructing other planned improvements.

7. In general, it shall be required that each new development handle its storm water runoff in such a manner that no net increase in storm runoff above the natural state will occur on the downstream properties. In other words, the preproject flows must not be exceeded by the postproject flows.

8. Streets are significant and important in urban drainage, and full use shall be made of streets for storm runoff up to reasonable limits, recognizing that the primary purpose of streets is for traffic. Reasonable limits of the use of streets for transportation of storm runoff shall be governed by the below listed design criteria:

a. Local street: No curb overtopping. Flow spread must leave at least one lane free of water.

b. Collector street: No curb overtopping. Flow spread must leave one lane free of water in each direction (2 lanes minimum).

9. When the above encroachment is exceeded, an independent storm water system shall be designed and constructed based upon a 10-year storm. The minimum storm drain size shall be twelve inches (12").

10. The storm water from a 100-year frequency storm shall be adequately conveyed either within the limits of the street rights of way or in storm drain easements without creating flood hazards to dwellings.

11. When an underground piping system is required, it shall be designed to carry a 10-year storm. Major hydraulic structures shall be designed to carry a 100-year storm.

12. Retention and detention basins on hillsides shall not be allowed.

13. Cross gutter drains on streets shall be avoided wherever possible. They shall not be allowed on collector and higher order streets.

14. When springs or other ground water sources are found on or above the developer's property, the construction of an engineered underground pipe system to eliminate the nuisance of this water will be required. Minimum pipe size shall be eight inches (8"). Plans shall be approved by the county public works director.

15. Necessary measures shall be taken to prevent erosion and scour at all points throughout the development. It shall be mitigated at all points of discharge and at the face of any cut or fill slope throughout the development.

16. During grading or construction on any property, including off site construction, the developer shall control both water used for construction and storm runoff in such a manner as to not adversely affect any adjoining properties, nor add silt or debris to any existing storm drain, wash, channel or roadway.

G.The drainage plans and construction drawings shall be approved by the county public works director prior to final plat approval or site approval and prior to the issuance of any building permits. The report shall be prepared in conformance with general accepted engineering practices.

H.A geology and soils report shall be prepared by a licensed professional engineer trained and experienced in the practice of geotechnical engineering in the area proposed for development, and shall be reviewed by the county public works and the land use authority. The report shall contain at least the following information:

1. A slope stability analysis shall be prepared containing conclusions and recommendations concerning the effects of a grading operation, introduction of water, both on and off site, including, where applicable, on mesa tops, seismic activity, and erosion on slope stability.

2. A foundation investigation with conclusions and recommendations concerning the effects of soil conditions on foundation and structural stability, including, where applicable, sheer strength, and shrink/swell potential of soils.

3. The location and yield of springs and seeps which shall be shown on the site plan.

4. Structural features including any geological limitations.

5. Existence of surface hazards including potential for failure of slopes or rock overhangs above the subject property.

6. Conclusions and recommendations regarding the effect of geologic conditions on the proposed development, together with recommendations identifying the means proposed to minimize any hazards to life or property, or adverse impact on the natural environment.

I.Prior to final plat or site plan approval of a project, a landscape plan, prepared by a licensed landscape contractor or a landscape architect, in conjunction with the overall site plan, must be submitted for approval. The plan shall outline areas being excavated and filled and describe in detail how the developer will restore or replant these areas. The plan shall specify types of temporary or permanent retention being used, together with sprinkler plans and water usage methods suitable to the soils of the project.

J.Other reports, plans, and information as may be deemed necessary by the county staff or public works director may be requested as a condition of the application. All studies and plans shall require review by the public works director. (Ord. 2006-910-O, 5-2-2006)